

Appl. No. 09/728,242  
Amdt. dated January 10, 2006  
Reply to Office Action of August 10, 2005

### REMARKS/ARGUMENTS

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-20 are pending.

By way of the Office Action mailed August 10, 2005, claims 1, 4, 7 – 10, 12, 14, and 16 - 20 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over U.S. H1298 to Ahr et al. (hereinafter referred to as Ahr(H1298)) in view of U.S. 5,681,300 to Ahr et al. (hereinafter referred to as Ahr('300)). This rejection is respectfully **traversed** to the extent that it may apply to the pending claims because the cited references do not establish *prima facie* obviousness.

Ahr(H1298) relates to absorbent structures including a fibrous superabsorbent core and an integrally attached hydrophobic facing layer (column 1, lines 10 - 12). Ahr(H1298) notes the desirability of providing good contact between the hydrophobic facing layer and the absorbent core, and the desirability to provide an absorbent core having a low bulk (column 1, lines 21 - 26). As such, Ahr(H1298) has a stated object to provide such a core having **low bulk** and yet a high absorbent capacity (column 1, lines 31 – 33).

Specifically, Ahr(H1298) teaches that the absorbent core includes from about 5 percent to about 95 percent of superabsorbent fibers, and from about 5 percent to about 95 percent synthetic thermoplastic fibers (column 2, lines 28 – 32). The hydrophobic facing layer consists essentially of synthetic hydrophobic thermoplastic fibers (column 2, lines 32 – 34). The layers are integrally bonded by a thermal process (column 2, lines 37 – 38). Preferably the bonding is carried out with heated calender rolls or using ultrasonic sealing (column 2, lines 38 – 39). This has the additional advantage that during the bonding the bulk of the absorbent structure may be significantly reduced (column 2, lines 40 – 42). For example, the caliper of the absorbent structures may be reduced by a factor of 5 to 15 during the thermobonding process (column 2, lines 42 – 44). As such, the absorbent structures can be made very thin, i.e., having a thickness of less than about 2 millimeters, preferably less than about 1 millimeter, typically from about 0.3 to about 2 millimeters (column 3, lines 27 – 30).

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It is noted that the Office Action asserts that "Ahr(H1298) discloses an expandable absorbent material..." Applicants' representative has been unable to locate any teaching within Ahr(H1298) that the absorbent structure described therein is expandable. Ahr(H1298) does teach that in unbonded areas the superabsorbent fibers absorb fluid and swell more freely than in bonded areas (column 2, lines 48, 49). However, this teaching refers to the superabsorbent fibers that are only one component of the absorbent structure taught by Ahr(H1298). It is known that superabsorbent fibers will swell. This does not mean, however, that the absorbent structure taught by Ahr(H1298) is capable of swelling. There is no express teaching that the absorbent structure of Ahr(H1298) is expandable, nor is it inevitable that the absorbent structure of Ahr(H1298) is expandable just because one component of the structure is expandable. It could well be that the thermoplastic fiber component of the absorbent core would restrict the absorbent structure from expanding.

It is also noted that the Office Action asserts that the absorbent material is fully capable of functioning as a surge material. Applicants' representative has been unable to locate any teaching within Ahr(H1298) that the absorbent structure described therein is fully capable of functioning as a surge material.

Additionally, it is noted that the Office Action asserts that Ahr(H1298) teaches use of a binder at column 3, lines 3-7. Applicants note that column 3, lines 3-7 discuss a cross-linking agent for the superabsorbent polymers themselves. Furthermore, the Office Action asserts that Ahr(H1298) discloses a binder that is a liquid at Col. 3, lines 6-7. Applicants submit that this citation does not refer to a liquid. A similar observation would also be made to the comments in the Office Action as to claim 10.

Ahr('300) discloses an absorbent article having an absorbent core including a blend of different types of fibers (column 3, lines 2 – 5). The blended absorbent core includes at least two groups or types of fibers, a first group/type of low denier, relatively short, hydrophilic fibers and a second group/type including higher denier, longer moisture insensitive synthetic fibers (column 10, lines 34 – 45). The fibers of the second group/type should also be of high compressive modulus and are preferably wet and dry resilient (column 11, lines 3 – 6). Crimped polyester fibers are suitable for use in the second group (column 11, lines 38-39). As acknowledged by the Office Action, crimping provides the fibers with improved resilience (column 11, lines 49-50).

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The Office Action sets forth that it would be obvious to one of ordinary skill in the art to make the thermoplastic fibers of Ahr(H1298) crimped, as taught by Ahr('300), to provide the material with improved compression resistance and resiliency, and provide room for the superabsorbent to swell as it absorbs liquid. However, improved compression resistance and resiliency would be counter to the stated objective of Ahr(H1298) to provide an absorbent structure having low bulk. Ahr(H1298) stresses the importance of reducing the thickness of the absorbent structure. To include compression resistant fibers would make achieving this objective at least more difficult, and would dissuade one of ordinary skill in the art from combining the teachings of these references. One of ordinary skill in the art would be much dissuaded and little motivated to combine the teachings of one reference touting the advantages of decreasing the thickness of an absorbent structure with the teachings of another reference touting the use of compression resistant fibers. Because one skilled in the art would be much dissuaded and little motivated to combine these references, the cited combination does not support a *prima facie* case of obviousness. Consequently, the rejection should be withdrawn.

Claims 2, 5, and 6 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Ahr(H1298) in view of Ahr('300) as applied to claim 1, and further in view of U.S. Patent Number 5,672,419 to Mukaida et al. (hereinafter referred to as Mukaida). This rejection is respectfully **traversed** to the extent that it may apply to the presently presented claims. Mukaida does not address the deficiencies associated with the combination of Ahr(H1298) and Ahr('300) described above. Therefore, for at least the reasons described above, the cited combination does not support a *prima facie* case of obviousness. Consequently, the rejection should be withdrawn.

Claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Ahr(H1298) in view of Ahr('300) as applied to claim 1, and further in view of U.S. Patent Number 6,362,389 to McDowall et al. (hereinafter referred to as McDowall). This rejection is respectfully **traversed** to the extent that it may apply to the presently presented claims. McDowall does not address the deficiencies associated with the combination of Ahr(H1298) and Ahr('300) described above. Therefore, for at least the reasons described above, the cited combination does not support a *prima facie* case of obviousness. Consequently, the rejection should be withdrawn.

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Claim 11 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Ahr(H1298) in view of Ahr('300) as applied to claim 1. This rejection is respectfully **traversed** to the extent that it may apply to the presently presented claims. For at least the reasons described above, the cited combination does not support a *prima facie* case of obviousness. Consequently, the rejection should be withdrawn.

Further, and as described in prior responses, Ahr(H1298) fails to disclose that the absorbent structure thereof is expandable. It is noted that the Office Action here sets forth that Ahr(H1298) remains silent as to the expandability of the absorbent material. The Office Action further sets forth that the superabsorbent material disclosed by Ahr(H1298) is well known in the art to swell upon contact with liquid. Applicants note, however, that while the absorbent structure of Ahr(H1298) includes superabsorbent material, the absorbent structure comprising the superabsorbent material is not necessarily expandable. For example, the combination of the thermoplastic fibers in the absorbent structure and the prescribed bonding conditions could possibly inhibit or preclude expandability of the Ahr(H1298) absorbent structure.

Claims 13 and 15 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over Ahr(H1298) in view of Ahr('300) as applied to claim 1, and further in view of U.S. Patent Number 5,350,370 to Jackson et al. (hereinafter referred to as Jackson). This rejection is respectfully **traversed** to the extent that it may apply to the presently presented claims. Jackson does not address the deficiencies associated with the combination of Ahr(H1298) and Ahr('300) described above. Therefore, for at least the reasons described above, the cited combination does not support a *prima facie* case of obviousness. Consequently, the rejection should be withdrawn.

For the reasons stated above, it is respectfully submitted that all of the presently presented claims are in form for allowance.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.


The undersigned may be reached at: 770-587-8626.

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Respectfully submitted,

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#### CERTIFICATE OF TRANSMISSION

I, Richard M. Shane, hereby certify that on January 10, 2006 this document is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300.

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